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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,413	02/13/2001	Faruk Mehmet Omer Eryurtlu	4-15-30	1921

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EXAMINER

RAMAN, USHA

ART UNIT PAPER NUMBER

2623

DATE MAILED: 07/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/782,413

Applicant(s)

ERYURTLU ET AL.

Examiner

Usha Raman

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4 and 6-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4 and 6-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments filed May 5, 2006 have been fully considered but they are not persuasive. Applicant's arguments stating that, "Chen makes it clear that only physical layer header containing the coding scheme specification is duplicated within the frame format" have been noted. However, as stated in the rejection, the duplication of information (at any required layer and not just the physical layer) is well known in the art to minimize errors. Chen is relied upon for duplicating only a header portion of a packet without duplicating the payload and is not relied upon for teaching of which layer this is done at. As a result, the examiner maintains rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
3. Claim 1, 4, and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rostoker et al. (EP 0782365) in view of Christian et al. (EP 1059776), Lee et al. (US Pat. 6,259,744) and Chen et al. (US 6,859,466).

In regards to claims 1 and 8, Rostoker discloses the method of supplying a real time data video data service dynamically variable compression rates (coding rates) for the audio video signals to fit within a fixed RF bandwidth. Note

abstract, and column 2, lines 26-37. This is achieved by controlling the compression rate of the audio packets, which in turn determines the video bandwidth. An increase in the audio BW results in the decreased video BW and an decreased audio bandwidth results in an increased video bandwidth. Note column 5, lines 10-24. A header includes two bits for defines four possible conditions of the variable compression rates: audio increase (i.e. decreased video), audio decrease (i.e. increased video), no change in audio and a preset audio. Note column 5, lines 37-42. One of the plurality of compression rates specified in the header are used for coding video data accordingly and transmitting the coded video data over an RF link to a video receiver. The no change and preset rate modes indicated in the header determines no change in the compression rate of the audio, and therefore no change in the compression rate of the video, therefore defines the "transparent mode" in the system of Rostoker, with a coding rate of 1/1. The telecommunications system is a mobile radio telecommunication system, where data is modulated for one of TDMA, CDMA modulation schemes, and the coded video data is transmitted over an radio link to a video receiver in the mobile system (cellular telephones). See abstract. Rostoker further discloses the step of using two bits in the header for selecting a coding scheme, transmitted with each transmitted radio burst. See column 5, lines 37-42. Rostoker teaches transmitting data including a combination of a video payload, header comprising a coding scheme. Rostoker

does not teach a packet containing TFI and applying time diversity with a further block of bits to the video payload.

Christian et al. teach a protocol for transmitting data over an EDGE network, where the RLC/MAC header of an EDGE packet comprises a TFI field in order to distinguish the TBF between multiple radio stations. Note paragraphs 73-74 in pages 9-10 and [0021]-[0022] in page 5.

It would have been obvious to one of ordinary skill in the art to further modify the invention by using a temporary flow indicator field in the header, in order to distinguish between multiple mobile radio stations.

Examiner takes official notice that the use of time diversity was well known in the art at the time of invention, wherein some signals are transmitted repeatedly in order to minimize burst errors. Furthermore, Lee discloses that the header must be communicated as reliable as possible since the errors in header can result in a loss of the entire information burst. See Lee column 1, line 67 and column 2, lines 1-4. Chen further discloses the step of repeating only the header information in order to reduce errors. See Chen: column 4, lines 42-44 and lines 57-61.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use time diversity applied with teachings of Lee and Chen in order to reliably communicate the header thereby repeating only the header information of a RLC/MAC block, in order to prevent burst errors.

In regards to claim 4, the modified system comprises the method of specifying an increased as well as decreased compression rate in the header (including no change in compression rates, 1/1), by varying the audio compression rate. Since Rostoker teaches specifying the variable video compression rates in the header, it would be obvious to further modify the system by using coding rates of 2/3, 1/2 and 1/3, in order to provide specific video compression rates, thereby providing the system with a plurality of preset compression rates.

In regards to claim 6, the modified system comprises the method of splitting a block into four sections and supplying each division to separate bursts for radio transmission, where each burst occupies a separate TDMA slot (therefore increases bandwidth). Note paragraphs 113-114 in page 12 in Christian. Since each of the bursts is transmitted separately, each of the bursts would require the header so that all the bursts corresponding to that payload can be identified for recomposition at the receiver.

In regards to claim 7, the modified system provides stealing bits in the header to indicate that the payload comprises a real time video data. Note Christian: paragraph 73 in page 9.

In regards to claim 9, the channel-coding scheme is inherently applied in the application layer, when the video data is encoded/decoded.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Balachandran et al. (WO 00/27064 and US Pat. 6,895,057) disclose the step of defining a plurality of channel coding rates to video data in a GPRS system by transmitting channel coding scheme in RLC/MAC header, the header comprising coding scheme, TFI fields.
5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usha Raman whose telephone number is (571) 272-7380. The examiner can normally be reached on Mon-Fri: 9am-6pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The

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fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

UR


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